GOVERNMENT OF INDIA
OCEAN DEVELOPMENT
LOK SABHA

UNSTARRED QUESTION NO:1998
ANSWERED ON:05.08.2005
DESALINATION PLANT
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Will the Minister of OCEAN DEVELOPMENT be pleased to state:

(a) whether the National Institute of Ocean Development has developed the desalination plant;

(b) if so, the salient features thereof;

(c) the cost of such desalination plants;

(d) the cities in which such plants have been set up so far; and

(e) the cities where such plants are proposed to be set up during 2005-06?

Answer

THE MINISTER OF STATE (INDEPENDENT CHARGE) OF THE DEPARTMENT OF OCEAN DEVELOPMENT (SHRI KAPIL SIBAL)

(a) & (b) Yes, Sir, National Institute of Ocean technology (NIOT), Chennai, an autonomous body of the Department, has developed a Low Temperature Thermal Desalination System (LTTD) technology for conversion of sea water into potable water. The LTTD is a process by which fresh water is produced by flashing warm surface seawater under low vacuum conditions and condensing the vapour using cold deep-sea water. After successful experiments in the laboratory NIOT demonstrated the LTTD Technology on an experimental basis on a barge mounted plant off Tuticorin, which successfully produced 10 lakhs liters in a 10-day period and the water quality is found to be excellent.

In the meantime NIOT has set up a LTTD plant with a capacity of 1-lakh liter per day, at Kavaratti in Lakshadweep. A 600m long pipe was successfully deployed for drawing the cold water. The heavy plant components were fabricated and installed. The plant was successfully commissioned in May 2005. The water produced is of excellent quality. The plant is generating about one lakh liter per day.

(c)&(d) The cost of 1 lakh liter LTTD desalination plant established at Kavaratti, Lakshadweep in May 2005 is about Rs.4.95 crores.

(e) The Lakshadweep Administration has shown interest to NIOT to set up such plants in six more islands in 2005-06.